Message

From: Burdett, Cheryl [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E8F84378969242DBA5EB260C1CC89FB8-CBURDETT]

Sent: 9/13/2016 2:55:25 PM

To: Dean Maraldo [Maraldo.Dean@epa.gov]

Subject: FW: Sampling Monitoring wells

Hi Dean:

Below is an e-mail from Paul Novak, EPA Cleveland Office and his recommendations for collecting a sample.

Sincerely,

Cheryl Burdett

From: Novak, Paul

Sent: Tuesday, September 13, 2016 9:44 AM

To: Burdett, Cheryl burdett.cheryl@epa.gov

Subject: PF. Consuling Magitaria and III

Subject: RE: Sampling Monitoring wells

Cheryl:

My calendar is empty (except Oct. 19-21) right now, so you can fill it in. Just be sure to have or Barb, or Ryan, or whomever put up the request into the database for our office.

Fifty feet is pretty deep, the ISCO won't work, so you are struck with bailing (or unless you can get a more powerful pump). I was just concerned about the level in the well you want to sample only from the standpoint of how much sediment we may introduce by bailing and the closeness to the screen. If well has a pump on it, then you can get specially cleaned tubing for fecal (handling will have to be very careful). If we have to use a bail, we have to have it cleaned, and then we might be able to put the sample bottle down the well (depending on the diameter of the casing). Again, if the well has a pump on it, everything changes. In any case the Agency should write a QAPP for what we propose to do.

Paul N.

From: Burdett, Cheryl

Sent: Tuesday, September 13, 2016 9:27 AM To: Novak, Paul < Novak, Paul @epa.gov > Subject: RE: Sampling Monitoring wells

Hi Paul:

Would you be able to assist this late October or Mid November on this sampling inspection? I know that the well is approximately 50 feet deep, I will get the exact dimensions. I have never sampled a well, but I was told by Dean Maraldo that we would want to purge the well and take a clean sample instead of static conditions. Why would I need to have a specific location in the water column to sample would that matter for my results?

I am still nervous using even clean tubing, I am wondering if there is tubing or a way to use a long stick or pole to grab a sample that can be used for collecting fecal coliform/E.coli in wells? The reason is because doesn't t bacteria attach to surfaces that is why only grab samples can be done when collecting fecal coliform and/or E.coli.

Sincerely,

Cheryl Burdett

From: Novak, Paul

Sent: Tuesday, September 13, 2016 8:01 AM **To:** Burdett, Cheryl < burdett.cheryl@epa.gov > **Subject:** RE: Sampling Monitoring wells

Cheryl:

That is the one parameter we haven't sampled for, but I would use an ISCO pump head (it will allow you pump from about 20 feet down) and won't disturb the well water column too much like bailing might. Do you need to empty the well of water first (purge), then allow it to fill, and then sample? Or, do you need to sample the water column as it is static? Also, where in the water column do you need to collect the sample (elevation wise)? You will need some info about the well, depth to water surface, depth to the bottom of the screen, (or height of the water column), diameter of the well, etc. All of this will give you some idea of the volume to purge (if you need to).

I would use a new lined hose and tubing (if you are going to use a pump) at each well. Or, if you are going to use a bailer, a new one for each well.

WD has ISCO pumps in the warehouse, and there are plenty of batteries, just need to charge them. If I can help you on this in any way please let me know.

Paul N.

From: Burdett, Cheryl

Sent: Tuesday, September 13, 2016 8:37 AM **To:** Novak, Paul < <u>Novak.Paul@epa.gov</u>>

Cc: Vincent, Anne Marie <vincent.annemarie@epa.gov>

Subject: RE: Sampling Monitoring wells

Hi Paul:

Would you have experience collecting samples from a monitoring well, I would be collecting for Fecal Coliform? How would I do that with rubber hosing to purge the well? I would need help knowing how long to purge to get to freshwater do you use a hydro-lab to monitor parameters to determine the length of time to purge a well? I also would need to borrow the equipment to pump the well and collect samples.

Sincerely,

Cheryl Burdett

From: Novak, Paul

Sent: Tuesday, September 13, 2016 7:33 AM
To: Burdett, Cheryl burdett.cheryl@epa.gov

Cc: Vincent, Anne Marie < vincent.annemarie@epa.gov>

Subject: RE: Sampling Monitoring wells

Cheryl:

We have sampled GW wells in the past and have monitored the installation of GW wells. We can use either a pump or a bail to get the liquid out for analysis (depending on the head needed).

Paul N.

From: Burdett, Cheryl

Sent: Monday, September 12, 2016 12:27 PM

To: Vincent, Anne Marie <vincent.annemarie@epa.gov>; Novak, Paul <Novak.Paul@epa.gov>

Subject: Sampling Monitoring wells

Hi Paul and Anne Marie:

Would anyone in the Cleveland office have experience and equipment to sample groundwater monitoring wells?

Sincerely,

Cheryl Burdett